



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/economy

Powers Steel, Inc.
4118 E. Elwood Street
Phoenix, AZ 85040

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER- Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Power Box Lintels

APPROVAL DOCUMENT: Drawing No. 1, titled " Power Box Lintel ", sheets 1 through 3 of 3, prepared by S. E. Consultants, Inc., dated October 08, 2012, signed and sealed by Steven W. Schaub, P.E., on October 08, 2012, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each lintel shall bear a permanent label with the manufacturer's name or logo and the Miami-Dade County logo.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA # 09-0630.06 and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**



Helmy A. Makar
10/25/2012

NOA No 12-0501.02
Expiration Date: 12/28/2016
Approval Date: 10/25/2012
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #06-0619.01

A. DRAWINGS

1. *Drawing No. 1, titled " Power Box Lintel ", sheets 1 through 3 of 3, prepared by S. E. Consultants, Inc., dated December 06, 2006, signed and sealed by Steven W. Schaub, P.E.*

B. TESTS

1. *Test report on flexural testing on Power Box Lintels Filled Models, per ASTM C-293, prepared by Certified Testing Laboratories, Report No. CTL 05028, dated 11/15/2005, signed and sealed by Ramesh Patel, P.E.*
2. *Test report on flexural testing on Power Box Lintels Filled Models, per ASTM C-293, prepared by Certified Testing Laboratories, Report No. CTL 05028, dated 12/22/2005, signed and sealed by Ramesh Patel, P.E.*

C. CALCULATIONS

1. *Calculations for Powers Steel Lintels, dated 05/15/2006, 543 pages, prepared by S. E. Consultants, Inc., signed and sealed by Steven W. Schaub, P.E.*
2. *Calculations for Powers Steel Lintels, dated 11/01/2006, 192 pages, prepared by S. E. Consultants, Inc., signed and sealed by Steven W. Schaub, P.E.*

D. QUALITY ASSURANCE

1. *By Miami-Dade Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *Mill Certified Inspection Report, dated September 15, 2005, for concrete by Rinker Materials.*

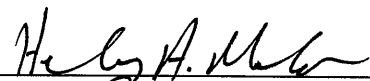
F. OTHER

1. *Quality Control Manual for Powers Box Lintels.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 09-0630.06

A. DRAWINGS

1. *Drawing No. 1, titled " Power Box Lintel ", sheets 1 through 3 of 3, prepared by S. E. Consultants, Inc., dated October 2006, signed and sealed by Steven W. Schaub, P.E., on August 23, 2011.*



Helmy A. Makar, P.E., M.S.
Product Control Unit Supervisor
NOA No 12-0501.02
Expiration Date: 12/28/2016
Approval Date: 10/25/2012

Powers Steel, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade Building and Neighborhood Compliance Department (BNC).*

E. MATERIAL CERTIFICATIONS

1. *None.*

3. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 1, titled " Power Box Lintel ", sheets 1 through 3 of 3, prepared by S. E. Consultants, Inc., dated October 08, 2012, signed and sealed by Steven W. Schaub, P.E., on October 08, 2012.*

B. TESTS

1. *Test report on flexural testing on Power Box Lintels Filled Models, per ASTM C-293, prepared by Certified Testing Laboratories, Report No. CTLA 1942W, dated 03/30/2009, signed and sealed by Ramesh Patel, P.E.*
2. *Test report on flexural testing on Power Box Lintels Filled Models, per ASTM C-293, prepared by Certified Testing Laboratories, Report No. CTLA 1942-1, dated 03/30/2009, signed and sealed by Ramesh Patel, P.E.*
3. *Test report on flexural testing on Power Box Lintels Filled Models, per ASTM C-293, prepared by Certified Testing Laboratories, Report No. CTLA 1942-2, dated 03/30/2009, signed and sealed by Ramesh Patel, P.E.*

C. CALCULATIONS

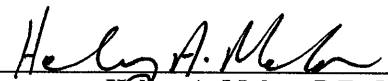
1. *Calculations for Powers Steel Lintels, dated 04/11/2012, 119 pages, prepared by S. E. Consultants, Inc., signed and sealed by Steven W. Schaub, P.E.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None.*



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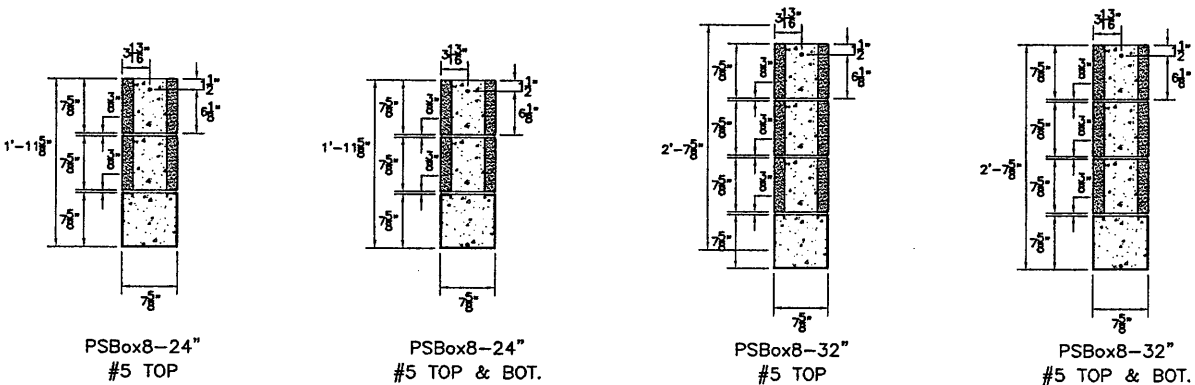
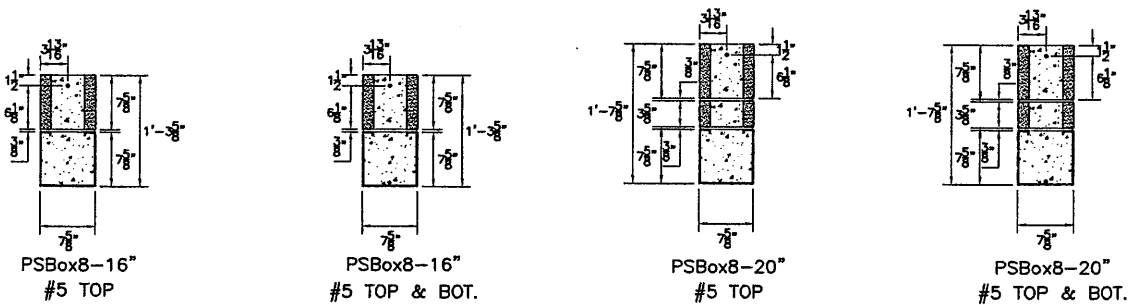
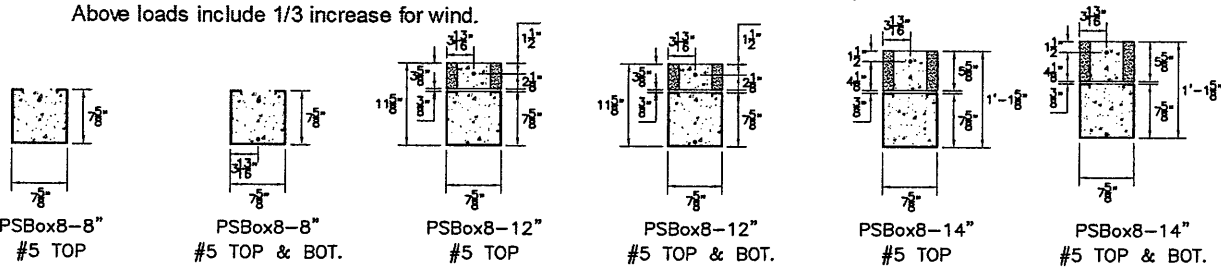
G:\CAD Drawings\Powers\Masonry\Lintel\AutoCAD Lintel Profiles\PSBox8MD Date Florida Table 2\PSBox8MD 20ga 16ft Lintel Lateral Table 2.dwg, Model, 10/8/2012 10:20:51 AM, jfg, HPLJ8000.pc3, 11x17, 1:27.0737

PSbox8MD-II Lintels

8" inch block width (20ga. < 16'-0" span)
LINTEL LOAD TABLE (IN POUNDS PER LINEAL FOOT) (16ga. >= 16'-0" span)
Lateral Load Table 3000 psi grout
— ALL LOADS ARE SUPERIMPOSED —

SPAN (ft)	PSbox 8-8" #5 top	PSbox 8-8" #5 top&bot	PSbox 8-12" #5 top	PSbox 8-12" #5 top&bot	PSbox 8-14" #5 top	PSbox 8-14" #5 top&bot	PSbox 8-16" #5 top	PSbox 8-16" #5 top&bot	PSbox 8-20" #5 top	PSbox 8-20" #5 top&bot	PSbox 8-24" #5 top	PSbox 8-24" #5 top&bot	PSbox 8-32" #5 top	PSbox 8-32" #5 top&bot	SPAN (ft)
1'-6"	3256	3256	4097	4097	4526	4526	4960	4960	5839	5839	6732	6732	8546	8546	1'-6"
2'-2"	2254	2254	2836	2836	3133	3133	3434	3434	4043	4043	4661	4661	5917	5917	2'-2"
2'-8"	1832	1832	2304	2304	2546	2546	2790	2790	3285	3285	3787	3787	4807	4807	2'-8"
3'-2"	1543	1543	1941	1941	2144	2144	2349	2349	2766	2766	3189	3189	4048	4048	3'-2"
4'-0"	1221	1221	1536	1536	1697	1697	1860	1860	2190	2190	2524	2524	3205	3205	4'-0"
4'-6"	1085	1085	1366	1366	1509	1509	1653	1653	1946	1946	2244	2244	2849	2849	4'-6"
5'-2"	945	945	1189	1189	1314	1314	1440	1440	1695	1695	1954	1954	2481	2481	5'-2"
6'-2"	792	792	996	996	1101	1101	1206	1206	1420	1420	1637	1637	1865	1926	6'-2"
7'-0"	698	698	878	878	970	970	1063	1063	1176	1204	1272	1306	1448	1495	7'-0"
8'-0"	611	611	738	749	781	794	822	838	901	922	974	1000	1108	1145	8'-0"
9'-2"	492	496	562	570	595	605	626	638	686	702	742	762	844	872	9'-2"
10'-0"	413	417	472	479	500	508	526	536	576	590	623	640	709	733	10'-0"
11'-2"	331	334	379	384	401	408	422	430	462	473	500	513	569	588	11'-2"
12'-0"	287	289	328	333	347	353	366	373	400	410	433	444	493	509	12'-0"
12'-8"	257	260	294	299	312	317	328	334	359	368	388	399	442	457	12'-8"
13'-4"	232	234	266	270	281	286	296	302	324	332	351	360	399	412	13'-4"
14'-0"	211	213	241	244	255	259	269	274	294	301	318	326	362	374	14'-0"
16'-0"	271	272	296	298	308	310	319	322	341	344	361	366	399	405	16'-0"
18'-0"	214	215	234	235	243	245	252	254	269	272	285	289	315	320	18'-0"
18'-8"	199	200	218	219	226	228	235	236	250	253	265	269	293	298	18'-8"
20'-8"	162	163	177	178	185	186	191	193	204	206	216	219	239	243	20'-8"
*22'-8"	135	136	148	150	154	156	160	162	172	174	182	186	202	207	22'-8"
*24'-0"															24'-0"
*26'-0"															26'-0"

*Note: All lintels greater than 20'-8" in length will require (2)-#5 bars top or (2)-#5 bars top&bot.
Above loads include 1/3 increase for wind.

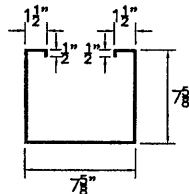


LATERAL LOADS

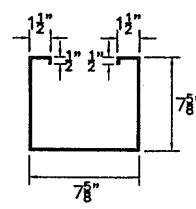
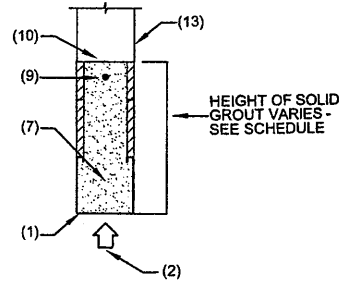
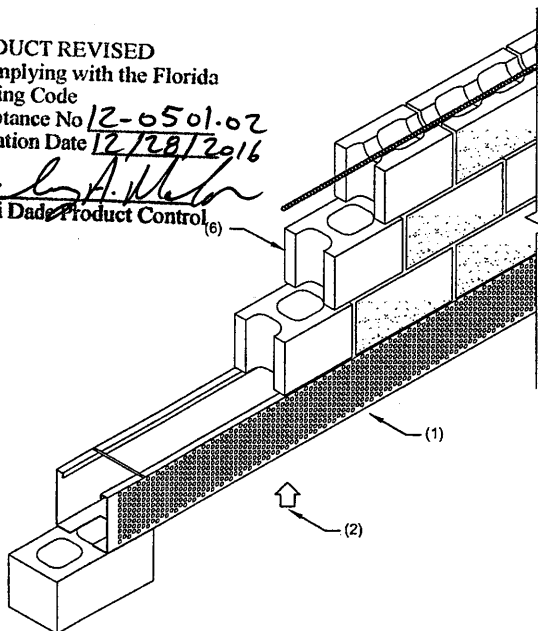
NOTES:

- PRODUCT NAME (PATENT NO. 6367209)
PREFORMED POWERS STEEL LINTEL SHALL BE GALVANIZED COIL STEEL AS MANUFACTURED BY POWERS STEEL AND WIRE PRODUCTS, INC. STEEL GRADE SHALL BE ASTM A570 GRADE C (FY = 40 ksi).
NOTE: DEFORMATIONS DO NOT EFFECT STRUCTURAL CAPACITY.
FOR SPANS LESS THAN 16'-0" BOX LINTELS TO BE 20 GA.
- SHORE LINTELS AS REQUIRED TO COMPENSATE FOR DEAD LOAD DEFLECTION ON NON-CURED MASONRY GROUT. ALL LINTELS GREATER THAN 18'-0" ARE BUILT WITH 1/2" CAMBER.
- LINTEL TO BE USED WITH CONCRETE MASONRY UNITS HAVING MINIMUM f_m AS SHOWN.
- STEEL SURFACES IN CONTACT WITH GROUT AND/OR MORTAR SHALL BE UNPAINTED AND FREE OF MATERIAL THAT MIGHT INHIBIT BOND.
- DESIGN BEARING OF POWERS STEEL LINTELS IS 8" FOR ALL LINTELS.
- f_m = 1500 psi. MASONRY UNITS SHALL CONFORM TO ASTM C90, GRADE N.
- GROUT = 3,000 psi. SLUMP RANGE: 8" TO 11". ROD OR VIBRATE GROUT ADEQUATELY TO ENSURE CONSOLIDATION OF GROUT (NO AIR POCKETS). GROUT SHALL COMPLY WITH ASTM C476 AND BE EITHER COARSE OR FINE GROUT.
- MORTAR: TYPE "S" OR TYPE "M" 1800 psi.
- TOP REINFORCING OR TOP OF WALL REINFORCING, IS REQUIRED BY CODES TO PROVIDE A CONTINUOUS TIE AROUND A STRUCTURE AND TO PROVIDE FOR UPLIFT RESISTANCE AT LINTELS.
- ATTACHMENTS TO TOP OF WALL PER ARCHITECTURAL AND/OR ENGINEERING DRAWINGS.
- LIMITATIONS:
THE LINTELS SHALL NOT BE USED IN A FIRE RESISTANCE RATED ASSEMBLY UNLESS A TEST REPORT DOCUMENTING FIRE RESISTANCE IS SUBMITTED TO THE BUILDING OFFICIAL.
A PROPER BARRIER IS REQUIRED WHEN USING CORROSIVE LUMBER PRODUCTS IN CONTACT WITH THE STEEL LINTELS. A PROPER BARRIER WOULD BE A POLYETHYLENE BARRIER WITH A 10 MIL THICKNESS OR TO MAINTAIN A MIN. 1/4" SPACING BETWEEN THE CORROSIVE LUMBER AND STEEL LINTEL.
- LOAD TABLE (PSbox8MD) CAN BE USED IN THE HVHZ IN MIAMI OR BROWARD COUNTIES.
- ALLOWABLE LOADS SHOWN IN THE TABLES FOR UPLIFT AND LATERAL LOAD CAPACITY INCLUDE A 1/3 INCREASE FOR WIND OR SEISMIC LOADING WITH NO FURTHER INCREASES ALLOWED. IF COMBINED LOADING CONDITIONS ARE APPLIED TO THE LINTELS FOR SIMULTANEOUS LOADING DIRECTIONS, THE ALLOWABLE LOADS SHOWN IN THE TABLES MUST BE ADJUSTED USING A UNITY EQUATION.
- ALL LOADS SHOWN IN TABLES ARE SUPERIMPOSED LOADS. TABLES ARE DATED 2/2012 AND CLEARLY INDICATE SUPERIMPOSED LOADS.
- #5 REINFORCING BAR (GRADE 40) IS TO SET APPROX. 1-1/2" FROM TOP OF ALL LINTEL DESIGNS AND IN SOME CASES THE BOTTOM OF LINTEL AS SHOWN ON LOAD TABLES. TOP HORIZONTAL REINFORCEMENT IS TO BE A CONTINUOUS TIE AS NOTED IN NOTE #9. IN THE CASE THAT THE LINTEL IS NOT WITHIN A COMPOSITE BOND BEAM SYSTEM, TOP HORIZONTAL REINFORCEMENT IS TO EXTEND 2'-0" PAST INSIDE OF JAMBS.

- MANUFACTURER:
POWERS STEEL
4118 E. ELWOOD PHOENIX, AZ 85040
PH# 602-437-1160 FAX# 602-437-5409
- TECHNICAL DATA AND ENGINEERING POWERS LINTELS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE FOLLOWING:
+ FLORIDA BUILDING CODE
+ NASPEC / AISI LIGHT GAGE COLD FORMED STEEL DESIGN
+ ACI 530 / ASCE 5 / TMS 402
NOTE: THE EDITIONS OF THE REFERENCED CODES AND STANDARDS APPLICABLE TO THE USE OF THIS PRODUCT APPROVAL ARE AS STIPULATED IN THE ACCOMPANYING SEALED LETTER DATED 6/20/2011.
STRUCTURAL ENGINEER FOR THESE LINTELS IS:
S.E. CONSULTANTS, INC.
5800 E. THOMAS RD. SUITE 104
SCOTTSDALE, AZ 85251
PHONE No. (480) 946-2010
FAX (480) 946-1909
- INSTALLATION:
POWERS LINTELS ARE TO BE INSTALLED IN ACCORDANCE WITH STANDARD CONSTRUCTIONS PRACTICES, SET TO PROPER LINE AND LEVEL, PLUMB AND TRUE, AND IN CORRECT RELATION TO OTHER WORK.
- LINTELS LOADED SIMULTANEOUSLY WITH VERTICAL (GRAVITY OR UPLIFT) AND HORIZONTAL (LATERAL) LOADS SHOULD BE CHECKED FOR THE COMBINED LOADING WITH THE FOLLOWING EQUATION:
$$\frac{\text{APPLIED VERTICAL LOAD}}{\text{SAFE VERTICAL LOAD}} + \frac{\text{APPLIED HORIZONTAL LOAD}}{\text{SAFE HORIZONTAL LOAD}} \leq 1.0$$
- FOR COMPOSITE LINTEL HEIGHTS NOT SHOWN, USE SAFE LOAD FROM NEXT LOWER HEIGHT SHOWN.
- FOR LINTEL LENGTHS NOT SHOWN, USE SAFE LOAD FROM LONGEST LENGTH SHOWN.
- SAFE LOADS ARE SUPERIMPOSED ALLOWABLE LOADS.



PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0501-02
Expiration Date 12/28/2016
By *[Signature]*
Miami Dade Product Control



TYPICAL POWER BOX LINTEL SECTION

[Signature]

OCT 08 2012

S.E. CONSULTANTS, Inc.
Structural Engineering Consultants
5800 East Thomas Road, Suite 104
Scottsdale, AZ 85251
(602)437-1160
Fax (602)437-5409

